DOCUMENT RESUME

ED 228 433 CE 035 536

AUTHOR Lewis, Morgan V.; Fraser, Jeannette L.
TITLE Increasing Community Involvement in Cooperative Vocational Education.
INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE Jun 82
CONTRACT 300-78-0032
NOTE 59p.
PUB TYPE Information Analyses (070) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Clearinghouses; *Community Involvement; *Cooperative Education; Educational Legislation; Employer Attitudes; *Federal Legislation; *Incentives; Postsecondary Education; School Business Relationship; School Community Relationship; *School Role; Secondary Education; Vocational Education; Work Experience Programs
IDENTIFIERS *Community Councils

ABSTRACT

Existing data on the extent and kinds of present cooperation between schools and employers show that large majorities of employers, educators, and students approve of and are willing to participate in work experience programs. The most recent data from the 1979-80 school year indicate that cooperative programs enrolled only 10 percent of all students pursuing occupationally-specific programs at secondary and postsecondary levels. Almost two-thirds of all seniors had regular part-time jobs, but the work was "youth" jobs requiring few specific occupational skills. The small percentage in cooperative placements does not appear to be due to an unwillingness of employers to provide such opportunities. A 1981 survey of members of the National Association of Manufacturers found that 22 percent already provide work experience for vocational students and an additional 56 percent are willing to do so. Following the presentation and discussion of the data, three methods for increasing private sector employer involvement--through community councils, financial incentives, and use of schools as brokers and clearinghouses--are are discussed in terms of six options that the federal government could pursue at the national level to encourage such involvement. The potential advantages and disadvantages of each of these options are noted. Thirteen data tables are provided. An appendix contains information on six reports of national councils and panels relevant to increased community involvement in cooperative vocational education. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED228433

INCREASING COMMUNITY INVOLVEMENT IN COOPERATIVE VOCATIONAL EDUCATION

Morgan V. Lewis
Jeannette L. Fraser

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

June 1982

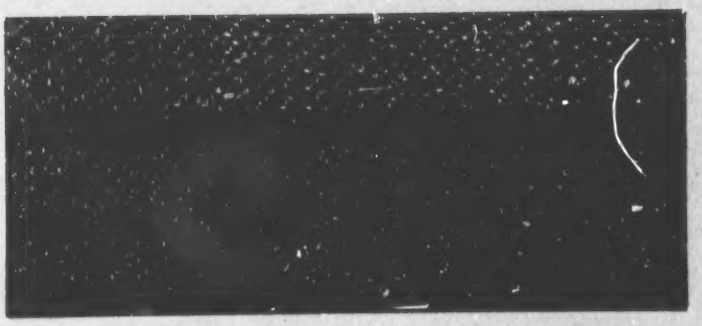
ED 235536

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

FUNDING INFORMATION

Project Title:	The National Center for Research in Vocational Education, Information for Planning and Policy Development Function
Contract Number:	OEC-300-78-0032
Project Number:	051 MH20004
Educational Act Under Which Funds Were Administered:	Education Amendments of 1976, P.L. 94-482
Source of Contract:	U.S. Department of Education, Office of Vocational and Adult Education Washington, DC
Contractor:	The National Center for Research in Vocational Education, The Ohio State University Columbus, Ohio 43210
Executive Director:	Robert E. Taylor
Disclaimer:	This publication was prepared pursuant to a contract with the Office of Vocational and Adult Education, U.S. Department of Education. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgement in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.
Discrimination Prohibited:	Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, The National Center for Research in Vocational Education project, like every program or activity receiving financial assistance from the U.S. Department of Education, must operate in compliance with these laws.

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
FOREWORD	vii
EXECUTIVE SUMMARY	ix
INTRODUCTION	1
The Problem	1
VOCATIONAL EDUCATION AND EMPLOYER INTERACTIONS	5
Background	5
Increasing Involvement	15
POLICY IMPLICATIONS	27
Community Councils	27
Financial Incentives	29
Schools as Brokers/Clearinghouses	30
Some Final Thoughts	32
REFERENCES	35
APPENDIX	39

LIST OF TABLES

Page

Table 1. Current or Most Recent Jobs of Senior High School Students Who Have Ever Worked. 6

Table 2. Cooperative Education Enrollment by Instructional Program for Secondary and Postsecondary Enrollments, 1979-80. 8

Table 3. Postsecondary Institution Staff Member Most Likely to Contact Employers about Job Openings as Reported by Directors, Teachers, Job Placement Specialists, and Counselors 9

Table 4. Postsecondary Institution Staff Member Most Likely to Contact Employers about Job Openings as Reported by Employers 10

Table 5. Participation by Business in Activities in Postsecondary Vocational-Technical Institutions as Reported by Employers 11

Table 6. Manufacturers' Willingness to Become Involved in Providing Work Experience. 12

Table 7. Involvement of Manufacturers in Providing Work Experience by Size of Company. 13

Table 8. Involvement of Manufacturers in Providing Work Experience by Size of Community Where Main Plant Is Located. 14

Table 9. Involvement of Manufacturers in Providing Work Experience by Region of the United States. 16

Table 10. Grade Given to High School Vocational Education by Manufacturers by Company Involvement in Providing Work Experience. 17

Table 11. Grade Given to Community or Junior College Vocational Education by Manufacturers by Company Involvement in Providing Work Experience. 18

Table 12. Company Benefits from Vocational Education by Involvement of Manufacturers In Providing Work Experience. 19

Table 13. Value of Public Vocational Education in Saving Company Training Costs, by Involvement of Manufacturers in Providing Work Experience. 20

FOREWORD

In the prior four years of the National Center contract, many studies of relevance to national policy in vocational education have been conducted. In this, the fifth year of the contract, data from several of these studies are being assembled to contribute to the discussion of selected policy issues. This paper examines the extent of community participation in vocational education programs conducted by public schools and postsecondary institutions and discusses national policy options for increasing such cooperation.

Several people contributed their time and thoughts to the development of this paper. Critiques of a preliminary draft were provided by B. Frank Brown, Kettering Foundation, Melbourne, Florida; Robert T. McGee, Denton Independent School District, Denton, Texas; and Kay A. Adams and Michael R. Crowe of the National Center staff.

Special appreciation is also extended to staff members in the Evaluation and Policy Division of the National Center: Morgan V. Lewis, Project Director; Jeannette L. Fraser, Program Associate; Richard D. Ruff, Senior Research Specialist; N. L. McCaslin, Division Associate Director. Additional assistance was provided by Bernice DeHart, word processor; Sherri Trayser, typist; Connie Faddis, editor; and especially by those members of the National Center staff who conducted the original studies upon which this paper draws.

The funds for this effort were provided by the Office of Vocational and Adult Education, U.S. Department of Education.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

Major influences that seem to be shaping public vocational education in the 1980s are likely to move it toward increased involvement with the private sector, particularly with employers. For the rest of this decade, efforts to increase the productivity of the American economy and improve its competitiveness in world markets will be high on the national agenda. The policies adopted to improve productivity will direct more of the nation's resources into the private sector to stimulate capital investment. Increased investment will be coupled with high rates of technological change. Public vocational education will find itself struggling to keep pace with the new technologies, with less resources to do so. Coupled with these economic and technological developments is an emerging consensus among many influential leaders that more of public vocational education, especially at the secondary level, should be conducted in the community, not in the classroom.

The most recent available data (for the 1979-80 school year) indicate that cooperative programs enrolled only 10 percent of all students pursuing occupationally specific vocational programs at the secondary and postsecondary levels. During this same school year, however, almost two-thirds (63 percent) of all seniors had regular part-time jobs while in high school. Students obviously want to and are working, but most of them are in "youth" jobs that require few specific occupational skills. Relatively few are in cooperative education programs that could add to their proficiency in specific occupational skills.

The small percentage in cooperative placements does not appear to be due to an unwillingness of employers to provide such opportunities. A 1981 survey of members of the National Association of Manufacturers found that 22 percent already provide work experience for vocational students, and an additional 56 percent are willing to do so. Manufacturers who are involved with public vocational education are more informed about the field and have more positive attitudes toward it.

How can the apparent benefits to students, employers, and schools from increased employer participation in skill training be more fully realized? Six options are proposed to increase employer participation. In line with the National Center's assigned function to provide information to assist national planning and policy development, these options are directed to changes in the federal vocational education legislation.

The first three options refer to encouraging community councils to bring employers and educators together to share the responsibility for planning, conducting, and evaluating skill training programs. Such councils would be far more influential

than traditional advisory councils, and would attempt to develop among employers a sense of shared responsibility or "ownership" for the training students receive.

OPTION 1: Assign specific functions to community councils, such as participation in planning, review of local plans, and evaluation of programs.

OPTION 2: Allocate funds directly to community councils to be used where the councils judge the need and potential impact to be greatest.

Both of these options would tend to make community councils more active and would be likely to increase the involvement of community representatives. The assigned functions may, however, require skills council members do not have. If the councils have authority to review plans, an appeals process would be needed to resolve differences between councils and local education agencies. Allocating funds to local councils could quickly become very costly and would require a control system to prevent misuse of funds.

OPTION 3: Establish a national institute or center to provide leadership, technical assistance, and information dissemination to state and local agencies and private groups that wish to increase private sector involvement in the preparation of youth for work.

Such an institute or center would endorse the importance of increased community involvement and would be a visible and accessible resource. It could conduct programs and research that would be beyond the resources available to local councils. As a national organization, though, it may have little impact at the local level.

Another approach to increase private sector involvement would be to offer financial incentives to employers in the form of training vouchers or tax credits. These methods depart radically from the historical purpose of federal vocational legislation.

OPTION 4: Require that all or a specified proportion of vocational education funding be directed to individuals for the purchase of preparation for employment requiring less than a baccalaureate degree.

Advocates of this approach claim that providing students the means to choose among different training institutions would

increase competition, and that this competition would increase efficiency and effectiveness. Opponents note that federal funding could pay for the training of only a small proportion of all vocational students. If vouchers were targeted to the most needy, this could have a stigmatizing effect. Secondary students may not be mature enough to make wise choices among trainers. Certification would be needed to avoid exploitation of students.

The tax credit approach has already been enacted for cooperative programs. There is no reliable evidence as to whether it has increased the number of employers participating in these programs or merely rewarded those who had already done so in the past. In 1981, eligibility was limited to students from disadvantaged families.

A third approach to increase employer involvement is for the schools to act as brokers or clearinghouses for training. Instead of offering courses themselves, schools would identify appropriate training opportunities in their communities and reimburse the community organizations for any extra costs incurred. Such reimbursement is allowed under the present federal legislation. The following options could be pursued to encourage more community-based trained.

OPTION 5: Specify that a certain percentage of the grant given to each state be spent on cooperative vocational education programs.

OPTION 6: Require that all programs receiving federal funds deliver half or more of the total training in cooperative placements, or justify why this is not possible.

Both of these options would increase enrollment in cooperative programs, but the burden would remain on school officials to encourage employers to participate. In areas where sufficient employers were not available, a procedure to justify noncooperative programs would be needed.

Of the various options proposed, those involving community councils seem most likely to encourage a sense of ownership among employers in the preparation of young people for work responsibilities. There are many benefits to be realized from increased private sector involvement. Care will have to be exercised, however, to ensure that young people continue to receive general training that is applicable in many employment settings. Increased employer participation cannot be allowed to subvert this goal.

INTRODUCTION

The Problem

Public education in general and vocational education in particular find themselves in a paradox with regard to providing relevant work experience opportunities for high school students. Surveys of employers, educators, and students uniformly yield large majorities who say they approve of and are willing to take part in work experience programs. In fact, the most recent national data from the High School and Beyond survey (Lewin-Epstein 1981) indicate that in the spring of 1980 over half of all high school seniors (63 percent) had some type of regular, out-of-school employment. On the other hand, only 10 percent of vocational education students in occupationally specific programs take part in school-supervised cooperative education programs, which should be the capstone of their training.

This paper reviews existing data on the extent and kinds of present cooperation between schools and employers. It then examines ways to encourage increased involvement of community representatives in the preparation of young people for work, especially participation by employers in actual skill training. The paper does not focus on involving employers in advisory councils for particular trades, internships for instructors, career exploration programs, or similar activities. As important as these are, they do not address the central concern of this paper, which is how to develop a sense of community responsibility or community "ownership," especially among employers, in the preparation of young people for work responsibilities.

The paper is written from the viewpoint that the major goal of public vocational education is to provide general skill training that is applicable in many employment settings.* In the 1980s, it will be increasingly difficult for public institutions to achieve this goal without increased cooperation from private employers. Increased cooperation, however, should not subvert the goal. The primary beneficiary should be the individual, not the firm.

In keeping with the National Center's assigned function to provide information for national planning and policy development,

---

*The paper does not address firm-specific training for present or future employees of particular employers. This can be a legitimate function of vocational education in some circumstances, but it is not appropriate for students who enter publicly supported institutions to seek general training.

the paper emphasizes ways to increase employer involvement that may be responsive to federal initiatives. Recent economic trends, particularly the decline in productivity of the American economy and the nation's weakening position in international trade, indicate that efforts to improve our competitiveness will continue to be a major national priority for at least the rest of the decade. Increased interaction of the public and private sectors in skill training could be an important component of these efforts.

From the perspective of vocational education itself, futures research (Lewis and Russell 1980) indicates that in the 1980s, vocational educators will have to cooperate more with employers. This decade is likely to experience high rates of technological change and high levels of investment in capital equipment. Coupled with these developments will be lower levels of public expenditure and increased competition for public dollars. Education, primarily because of smaller number of births in the late 1960s and 1970s, is a likely loser in this competition. Education in 1990 is likely to have fewer real resources (dollars adjusted for inflation) than in 1980. If these trends proceed, as appears likely, vocational education will find itself trying to keep pace with rapid changes in technology and equipment, with less money to do so. This will produce strong pressures for increased involvement of employers in skill preparation.

Coupled with these technological and economic pressures is an emerging consensus among many influential leaders that increased private sector involvement is the direction that vocational education, especially at the secondary level, should go. From 1973 to 1980 there were six reports prepared by prestigious national panels and commissions, all of which called for increased community involvement at the secondary level. Four of these reports contained recommendations directed specifically to vocational education.*

The report from the Carnegie Council on Policy Studies in Higher Education (1979), for example, has a chapter titled "Vocational Education: Change Everything, Including the Name." The chapter presents evidence that leads the Council to call for "fundamental change in the status of vocational education especially at the high school level" (p. 141). The Council believes that, "classroom vocational education at the high school level should be deemphasized in favor of training conducted under

---

*The appendix to this paper presents information on the composition and sponsorships of the panels, and quotes the recommendations directed specifically to public vocational education.

employer auspices, apprenticeship, work-experience programs, cooperative education, and other programs that take the students into the community" (ibid.).

The National Commission on Youth, a group of nationally recognized scholars and leaders from business, labor, education, and government established by the Charles F. Kettering Foundation, was more critical. This Commission charges that "the secondary schools have failed in the area of vocational education" (1980, p. 193). The Commission therefore recommends that "vocational education be shifted from the high schools into the community where it more properly belongs" (p. 194).

The evidence that these groups examined and their interpretations of it are certainly controversial. Nevertheless, all of these panels were composed of prominent and influential individuals. Their recommendations are given careful consideration at the highest levels of policymaking. Even if few of the recommendations are adopted directly, these reports will inevitably help shape the context of the policy discussions on the role of secondary schools and on the most appropriate ways to prepare young people for assuming the responsibilities of adulthood. Vocational education will increasingly be called upon to involve employers or to explain why employers are not involved.

The next section of this paper presents data from different sources on the current kinds and extent of interactions between schools and employers. Following these data is a discussion of some of the major methods that have been proposed to increase employer involvement, including community councils, financial incentives, and schools acting as brokers/clearinghouses to arrange training in the private sector. The final section presents some options that the federal government could pursue to encourage greater employer participation in skill training. The potential advantages and disadvantages of each of these options are noted.

VOCATIONAL EDUCATION AND EMPLOYER INTERACTIONS

Background

For the majority of high school students, working is an integral part of their life. Researchers reporting on analysis from the High School and Beyond survey found "that employment . . . and labor market participation are widespread among teenagers, far exceeding what is commonly believed to be the prevalence of these phenomena" (Lewin-Epstein 1981, p. 131). They continue by stating that "the unemployment of high school students may have direct welfare implications for their families in addition to . . . long-term effects that are a result of the lack of exposure to the world of work and the absence of saleable skills" (p. 135).

Cooperative programs provide a mechanism by which students can meet the need to work as well as the need to be exposed to "hands-on" experience in the labor market. These programs enable advanced students to apply the skills they have learned in classrooms and laboratories and to acquire additional knowledge and proficiency not available in the classroom setting. To fully achieve these objectives, the jobs in which co-op students are placed must be closely related to students' areas of training and the jobs must provide a variety of experiences. To ensure this outcome, teachers or co-op coordinators must identify the appropriate employers and enlist their participation. After students are placed, periodic visits to the work site are needed to ensure both the quality of students' performance and the quality of the training experience.

The vast majority of labor market experiences of high school students are probably not of this quality. Data in table 1 suggest that most high school students work in typical youth jobs in settings such as fast food restaurants, grocery stores, gas stations, and the like. Only 23 percent are in the jobs requiring some skills of office, skilled trade, or factory work, while 27 percent are in jobs that require no entry level skill, such as waitress, babysitting, and odd jobs. These lower skill jobs obviously provide good training in employability skills--such as coming to work on time and getting along with supervisors--but provide little skill training usable in other jobs. Some co-op placements, especially those in distributive-marketing education, are also in typical youth jobs. In these programs, however, job experience is related to expressed career interests, and is supplemented by related classroom and laboratory instruction.

Cooperative education provides a vehicle for students to acquire saleable skills as well as a mechanism to provide income. Not many students, however, are participating in these programs.

TABLE 1

CURRENT OR MOST RECENT JOBS OF SENIOR HIGH SCHOOL STUDENTS WHO HAVE EVER WORKED

Type of Job	Vocational Seniors (percent)	All Seniors (percent)
Store clerk or salesperson	13	21
Waiter or waitress	12	17
Babysitting or child care	11	5
Office or clerical	11	10
Skilled trade	8	6
Other manual labor	7	8
Farm or agricultural work	7	4
Lawn work or odd jobs	4	2
Factory work, unskilled or semiskilled	4	3
Hospital or health	3	4
Other	20	20
TOTAL (percent)	100	100
Number	[7,713]	[18,095]

SOURCE: Tabulated data from High School and Beyond, 1980 national survey of high school sophomores and seniors. See Lewin-Epstein 1981 for a description of the survey.

While 10 percent of all secondary and postsecondary vocational students participate in cooperative education, only 8 percent and 3 percent respectively are participating in trade and industrial or technical programs (see table 2). These low participation rates point to the need to make more co-op placements available in a wider variety of employment settings, particularly if the United States is to maintain a trained labor force in high-level skill areas.

While there are no national data that specifically address how active school personnel are in the establishment and maintenance of cooperative work experience programs, there are data available that address the question of contacts with employers for job placement. Data in tables 3 and 4 show that the majority of the contacts between schools and employers are made by job placement coordinators and vocational-technical teachers. Other data from the same survey of postsecondary institutions show that one out of every five teachers, counselors, and job placement specialists spends some time in job placement activities. Those who are currently involved in job placement activities spend approximately five hours per week in these activities, with one hour spent in contacting employers about specific jobs. These figures do not address the issue of cooperative education, but they do suggest that many school personnel are contacting employers on a regular basis, and that communication channels between schools and employers exist.

Employers are currently participating in a wide variety of school-related activities. Table 5 shows that while few employers are involved with postsecondary vocational school activities at the highest level of involvement, much greater numbers occasionally participate (at lower levels) in school activities. Manufacturers' willingness to be involved in providing work experience is reported in table 6. For every two manufacturers currently involved in providing work experience, there are five manufacturers willing to become involved. Altogether, nearly four out of five manufacturers identify themselves as potential providers of cooperative education placements. Data from both of these tables suggest that employers are willing to be involved in a variety of activities, and they are not currently involved as fully as they could be.

A number of different factors are associated with employers' involvement in work experience. Table 7 indicates that firms with 250 employees or more have a higher participation rate than smaller firms. It also appears that the largest firms are most likely to have vocational students in their companies. Table 8 shows that the highest participation rates can be found in small and medium-size cities, while the lowest participation rates are in the suburbs and large cities. There are also great variations in the amount of involvement in different regions (as defined by the U.S. Bureau of the Census 1978) of the country (table 9).

TABLE 2

COOPERATIVE EDUCATION ENROLLMENT BY INSTRUCTIONAL PROGRAM FOR SECONDARY AND POSTSECONDARY ENROLLMENTS, 1979-80

Instructional Program	Cooperative Education Enrollment	Total Enrollment in Occupationally Specific Programs	Percent of Cooperative Education Enrollment
Agriculture	25,332	384,940	7%
Distributive Education	198,380	601,275	33%
Health Occupations Education	19,996	455,129	4%
Occupational Home Economics	39,096	242,087	16%
Office Occupations	120,176	1,970,518	6%
Technical	10,282	387,117	3%
Trade & Industrial Occupations	149,373	1,792,052	8%
Other Programs	33,028	146,390	23%
TOTAL	595,663	5,979,508	10%

SOURCE: National Center for Education Statistics, 1982.

TABLE 3

POSTSECONDARY INSTITUTION STAFF MEMBER MOST LIKELY TO CONTACT EMPLOYERS ABOUT JOB OPENINGS AS REPORTED BY DIRECTORS, TEACHERS, JOB PLACEMENT SPECIALISTS, AND COUNSELORS

Postsecondary Staff Member	Percent Currently Contacting Employers (percent)
School Job Placement Coordinator	35
Vocational-Technical Education Teacher	35
No One	13
Other	10
Guidance/Vocational Counselor	5
Vocational-Technical Education Director	2
TOTAL (percent)	100
Number	[642]

SOURCE: Tabulation of data from Correlates of Job Placement in Postsecondary Institutions survey. See McKinney et al. 1982 for a description of the survey.

TABLE 4

POSTSECONDARY INSTITUTION STAFF MEMBER MOST LIKELY TO CONTACT EMPLOYERS ABOUT JOB OPENINGS AS REPORTED BY EMPLOYERS

Postsecondary Staff Member	Percent Currently Contacting Employers (percent)
Vocational-Technical Education Teacher	42
School Job Placement Coordinator	35
Guidance/Vocational Counselor	11
Vocational-Technical Education Director	6
Other	6
TOTAL (percent)	100
Number	[138]

SOURCE: Tabulation of data from Correlates of Job Placement in Postsecondary Institutions survey. See McKinney et al. 1982 for a description of the survey.

TABLE 5

PARTICIPATION BY BUSINESS IN ACTIVITIES IN POSTSECONDARY VOCATIONAL-TECHNICAL INSTITUTIONS AS REPORTED BY EMPLOYERS

Frequency of Participation	Activities with Schools' Vocational Programs: Cooperative Education Program (percent)	Career Days (percent)	Industry-School Staff Exchange (percent)	Providing Guest Lecturer (percent)	Helping Vocational Student Organization (percent)
Very often	6	8	1	4	1
Often or Sometimes	39	40	19	29	18
Rarely or Never	55	52	80	67	81
TOTAL (percent)	100	100	100	100	100
Number	[313]	[328]	[316]	[322]	[320]

SOURCE: Tabulation of data from Correlates of Job Placement in Postsecondary Institutions survey. See McKinney et al. 1982 for a description of the survey.

TABLE 6

MANUFACTURERS' WILLINGNESS TO BECOME INVOLVED

IN PROVIDING WORK EXPERIENCE

	Percent
Currently Involved	22
Willing to Be Involved	56
Not Willing to Be Involved	22
TOTAL (percent)	100
Number	[737]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

TABLE 7

INVOLVEMENT OF MANUFACTURERS IN PROVIDING

WORK EXPERIENCE BY SIZE OF COMPANY

Level of Involvement	All Manufacturers (percent)	Number of Employees: Under 20 (percent)	20-99 (percent)	100-249 (percent)	250-999 (percent)	1000 or more (percent)
Involved	22	19	18	18	24	33[a]
Not Involved	78	81	82	82	76	67
TOTAL (percent)	100	100	100	100	100	100
Number	[732]	[21]	[234]	[167]	[190]	[120]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Difference between involved and not involved manufacturers significant at chi square = 12.72, $p < .02$, $df = 4$.

TABLE 8

INVOLVEMENT OF MANUFACTURERS IN PROVIDING WORK EXPERIENCE

BY SIZE OF COMMUNITY WHERE MAIN PLANT IS LOCATED

Level of Involvement	All Manufacturers (percent)	Size of Community: Open Country or Farm (percent)	Small City under 50,000 (percent)	Medium City 50,000-500,000 (percent)	Suburb Near City Over 500,000 (percent)	Large City 500,000 or More (percent)
Involved	22	22	28	24	16	15[a]
Not Involved	78	78	72	76	84	85
TOTAL (percent)	100	100	100	100	100	100
Number	[726]	[37]	[257]	[193]	[106]	[133]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Difference between involved and not involved manufacturers significant at chi square = 11.50, $p < .05$, df = 4.

Manufacturers in the northeast and the west north-central regions have significantly higher rates of participation than manufacturers in the mountain, east south-central, and the Pacific states. These varying participation rates suggest that successful establishment of cooperative education linkages with manufacturers is influenced by characteristics of the communities, the labor markets, and the characteristics of the firms themselves.

The attitudes of company officials could be expected to be influenced by the company's participation in cooperative education. Attitudes assessed for manufacturers show that without exception, those who participate in cooperative education hold more positive attitudes about the vocational education enterprise. Which is cause and which is effect, however, cannot be determined from this type of analysis. Firms with more positive attitudes may be more willing to participate, or, participation may lead to more favorable attitudes.

Tables 10 and 11 present manufacturers' overall assessment of secondary and postsecondary vocational education as measured by a five-point grading scale. For both levels of vocational education, manufacturers who are currently providing work experience are more likely to have an opinion, and that opinion is more positive than the opinion of all manufacturers. While the results are more striking for secondary vocational education, indicators show that positive attitudes are associated with participation for both educational levels. This suggests that manufacturers are having good experiences with high school and postsecondary students assigned to their establishments, as well as favorable interactions with school personnel.

Tables 12 and 13 address manufacturers' perceived benefits from work experience programs. As in the previous tables, manufacturers currently involved tend to be more likely to report an opinion, and that opinion is more positive than the opinions of nonparticipating manufacturers. Over three-fourths of the manufacturers involved in co-op programs believe that their companies benefit from vocational education, while less than two-thirds of the nonparticipants have that opinion. Over half of the manufacturers who are involved believe that vocational education has saved their companies money on the costs of training workers (see table 12). Once again, this is a more positive response than the response of all manufacturers.

Increasing Involvement

If, as the data indicate, high school students want to work and employers are willing to provide work experience, why are there not more vocational students in cooperative education programs? The advantages to all parties seem obvious. Students

TABLE 9

INVOLVEMENT OF MANUFACTURERS IN PROVIDING WORK EXPERIENCE

BY REGION OF THE UNITED STATES

Level of Involvement	All Manufacturers (percent)	Region of the United States: North East (percent)	West North-Central (percent)	Middle Atlantic (percent)	East North-Central (percent)	South Atlantic (percent)	West South-Central (percent)	Mountain (percent)	East South-Central (percent)	Pacific (percent)
Involved	22	31	30	23	22	22	18	13	13	10
Not Involved	78	69	70	77	78	78	82	87	87	90
TOTAL (percent)	100	100	100	100	100	100	100	100	100	100
Number	[726]	[51]	[70]	[108]	[295]	[74]	[49]	[8]	[32]	[39]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

TABLE 10

GRADE GIVEN TO HIGH SCHOOL VOCATIONAL EDUCATION BY MANUFACTURERS BY COMPANY INVOLVEMENT IN PROVIDING WORK EXPERIENCE

Grade[a]	All Manufacturers (percent)	Manufacturers[b] Involved (percent)	Not Involved (percent)
A	7	10	6
B	28	33	26
C	36	40	35
D	14	9	16
F	4	2	5
No Opinion	11	6	12
TOTAL (percent)	100	100	100
Number	[731]	[162]	[569]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Respondents were asked to assign a grade to high school vocational education in the same manner as students are given grades to denote the quality of their work. (A = excellent, B = good, C = fair, D = poor, F = fail)

[b]Difference between involved and not involved manufacturers significant at chi square = 27.17, $p < .001$, df = 8.

TABLE 11

GRADE GIVEN TO COMMUNITY OR JUNIOR COLLEGE VOCATIONAL EDUCATION BY MANUFACTURERS BY COMPANY INVOLVEMENT IN PROVIDING WORK EXPERIENCE

Grade[a]	All Manufacturers (percent)	Manufacturers[b] Involved (percent)	Not Involved (percent)
A	12	16	11
B	45	47	44
C	25	26	25
D	5	2	5
F	1	1	2
No Opinion	12	8	13
TOTAL (percent)	100	100	100
Number	[730]	[160]	[160]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Respondents were asked to assign a grade to community or junior college vocational education in the same manner as students are given grades to denote the quality of their work. (A = excellent, B = good, C = fair, D = poor, F = fail)

[b]Difference between involved and not involved manufacturers significant at chi square = 27.17, $p < .001$, df = 8.

TABLE 12

COMPANY BENEFITS FROM VOCATIONAL EDUCATION BY INVOLVEMENT OF MANUFACTURERS IN PROVIDING WORK EXPERIENCE

Does Company Benefit?	All Manufacturers (percent)	Manufacturers[a] Involved (percent)	Not Involved (percent)
Yes	59	78	53
No	16	7	19
Not Sure	25	15	28
TOTAL (percent)	100	100	100
Number	[728]	[163]	[565]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Difference between involved and not involved manufacturers significant at chi square = 32.79, $p < .001$, $df = 2$.

TABLE 13

VALUE OF PUBLIC VOCATIONAL EDUCATION IN SAVING COMPANY TRAINING COSTS, BY INVOLVEMENT OF MANUFACTURERS IN PROVIDING WORK EXPERIENCE

Does Vocational Education Save Training Costs?	All Manufacturers (percent)	Manufacturers[a] Involved (percent)	Manufacturers[a] Not Involved (percent)
Yes	39	55	35
No	24	17	25
Do Not Know	37	28	40
TOTAL (percent)	100	100	100
Number	[728]	[162]	[566]

SOURCE: Tabulation of data from National Association of Manufacturers survey. See Nunez and Russell 1981 for a description of the survey.

[a]Difference between involved and not involved manufacturers significant at chi square = 21.11, $p < .001$, $df = 2$.

acquire experience on current equipment in actual production settings. Schools do not need to purchase expensive equipment and consumable supplies. Employers have an opportunity to screen potential employees and to contribute to the development of a well-trained work force.

When advantages appear so obvious but are not more fully achieved, there usually are some less obvious factors at work that limit realization. In the present case, these less obvious factors appear to arise from an inherent conflict between what is in the best interest of the individual--broad, generalizable training--and what is in the best interest of the employer--narrow, firm-specific training. Individuals in training want to acquire skills that are applicable to as large a number of potential employers as possible. Employers want workers who perform specific tasks in their companies as efficiently as possible, and who will not transfer their skills to competitors for more pay.

To say there is an inherent conflict between the interests of the individual and the employer, is not to say this conflict cannot be resolved. There are inherent conflicts in many, if not most, relationships in society: the individual with the state, a buyer with a seller, even a parent with a child. Ways are found to resolve these conflicts, usually to the mutual benefit of both parties.

Cooperative education is itself one way to resolve the conflict between students who are also workers and employers who are also trainers. The schools act as a third party to assure that the students have a variety of training experiences and that they meets performance standards.

Under the cooperative model, however, the major responsibility for planning and implementing training experiences lies with the school. Employers "help out" when they are asked to and when they can, but the school is the primary agent. If a larger number of young people are to acquire training in employment settings, new models that assign increased responsibilities to employers appear to be needed. These models will have to include the development of a sense of ownership on the part of employers, which implies that employers will have to be involved in the planning, decision making, conduct, and evaluation of programs. They also must take some responsibility for the quality of the programs.

Community Councils

One method that has been advocated for increasing a sense of ownership among employers in the preparation of youth for work is the establishment of local councils to link the schools with employers. The goals of these councils are much broader than those

of the advisory councils that have been traditional for vocational programs. There are three main models of community councils that are being advocated on a national level:

1. Industry-Education Councils (National Association for Industry-Education Cooperation undated)

2. Local Collaborative Councils, also often referred to Work-Education or Education-Work Councils (Elsman and the National Institute for Work and Learning 1981)

3. Private industry councils (U.S. Department of Labor 1980)

To the uninitiated, these three kinds of councils might seem very similar, but there are important differences among them.

Industry-Education Councils. The approach sponsored by the National Association for Industry-Education Cooperation (NAIEC) stresses curriculum and staff development aimed toward "refocusing education in ways designed to help individuals acquire employability skills and develop attitudes as preparation for paid and unpaid work" (Clark 1982). These councils bring together key decisionmakers from education and industry (defined as the business/labor/government/professional community) to bring about change in the schools. The goal and methods are clearly stated and emphasize that a primary, if not the primary, purpose of education is preparation for work. The close industry linkage is reflected in the development of the Handbook of NAIEC, which was originally produced by the Education Department of the National Association of Manufactures (National Association, undated).

Local Collaborative Councils. Collaborative Council is the current, preferred title for the type of local association proposed in The Boundless Resource (Willard Wirtz and the National Manpower Institute 1975). Collaborative Councils, like Industry-Education Councils, have the general goal of bringing educators and employers closer together. Unlike the Industry-Education Councils, however, Collaborative Councils depend far more on local leadership to select the form, mission, and activities for the councils. Elsman (1981) groups the main types of activities these councils engage in as: fact-finding, analysis and problem-solving, information networking, and demonstration projects or direct service.

The adoption of the adjective "collaborative" to describe these councils may be premature. At least one evaluation (Prager, et al. 1980) found little evidence that these councils had achieved shared decision making in pursuit of common goals. Prager and her colleagues concluded that the councils had made tangible accomplishments, but had not produced "true institutional collaboration" (p. 107).

There do not appear to have been any systematic evaluations of either the Industry-Education or Collaborative Councils to determine if they achieved higher rates of cooperative or work-study participation by students in the communities they serve. Informal contacts with a number of individuals at the state and local level involved with councils or other linkage programs suggest that such approaches do increase the number of employers willing to participate. The councils undoubtedly perform a variety of valuable services and have been sufficiently studied to provide guidelines that help distinguish more and less successful practices. One function they obviously can perform is to bring school and employer representatives together to discuss ways of eliminating bureaucratic obstacles to increased work-study and cooperative placements. To our knowledge, however, their success in increasing employer participation is as yet undetermined.

Private Industry Councils. A variation on the community council, with far heavier decision making power vested in employers, is the Private Industry Council (PIC) operated under Title VII of the Comprehensive Employment and Training Act. This is a federally supported program administered by the U.S. Department of Labor. To receive funds for this program, a prime sponsor (typically a state or local government) must establish a PIC to involve the business community in the operation of the program. Participants in the program are limited primarily to disadvantaged job seekers, but upgrading of underemployed, nondisadvantaged workers is also possible.

Under the program, employers are encouraged to provide (1) on-the-job and classroom training; (2) supportive services, such as medical, legal, and day care; (3) employment-related services, such as counseling and orientation to the world of work; and (4) other employment and training activities, including job restructuring and development of flexitime arrangements.

A majority of the members of each PIC are business and industry representatives. Organized labor, community-based organizations, and education must also be represented. The PIC members are appointed by the prime sponsor, which is accountable for the PIC activities. Each PIC decides which of the allowable functions it will perform.

The structure of the PIC and its decision-making authority potentially make it much more influential than other community-based councils. A few of its key features, however, suggest that it may be a relatively poor model for enhancing employer involvement with public vocational education.

The major difference between a PIC and the other councils is that a PIC is a federally funded program. All employer costs, except wages paid during on-the-job (OJT) training, are eligible

for 100 percent reimbursement. Even OJT wages are eligible up to a 50 percent "rule of thumb" limit. The cost to the federal government of assuming a similar burden for the OJT wages of the vocational students who were in cooperative jobs during the 1979-80 school year would have been $568.7 million assuming that each co-op student worked fifteen hours a week at the minimum wage for thirty-eight weeks (595,663 students times $3.35 times 15 hours times 38 weeks at 50 percent reimbursement equals $568,710,000). This amounts to over three-fourths (77 percent) of the total federal expenditures for vocational education for that year ($734,860,000) (National Center for Education Statistics 1982).

The objection may be raised that there is no need for wage subsidies for co-op students, for they are not predominantly disadvantaged individuals who have difficulty securing employment. This objection, however, merely highlights another key difference between PICs and other efforts to bring employers and public vocational education closer together: the characteristics of the clients who are served. Some vocational students are disadvantaged and need additional services to assume productive roles, but most do not. Because of these differences, the experience of PICs may have relatively limited implications for other efforts to increase private sector participation in the preparation of youth for work. On the crucial measure of the number of people that PICs have placed in work-study jobs, an early evaluation (Seessel 1980) concluded that the value of the Private Sector Initiative Program, of which PICs are a part, was "not proven" (p. 101).

Financial Incentives

One of the most frequent suggestions for motivating private employers is the use of direct financial incentives. The two incentives most often proposed are voucher systems and tax credits.

Voucher systems involve an entitlement to a specified amount of education or training that people could use at any point in their lives. The education or training could be purchased from any provider who met certain standards. Advocates of the voucher approach believe it would increase competition among training organizations. Public trainers would have to demonstrate that their services yield labor market benefits or they would lose students to trainers who do produce such benefits.

If Congress decided to depart radically from the historic purpose of vocational legislation, it could rewrite the legislation to eliminate institutional support and to direct all federal funds to individuals in the form of vouchers. Since federal funds are only about 10 percent of governmental expenditures for

public vocational education, federal vouchers would not pay for the training of many students. Even if the vouchers were limited to $1,000 per student, federal funds from the vocational education legislation in FY 1980 would have been available to only seven hundred thirty-five thousand students, or 12 percent of those enrolled in occupationally specific programs in the 1979-80 school year (National Center for Education Statistics 1982).

Advocates of the voucher approach (e.g., Panel on Youth of the President's Science Advisory Committee 1973) are thinking far more broadly than application to vocational education alone. They propose that all youngsters at the end of compulsory education be given an entitlement to a specified amount of education or training. Since this is such a radical departure and is potentially disruptive of historic patterns, most advocates recommend that the approach be tested on an experimental basis before any broad national policy is adopted.

The tax credit approach has been used on a nationwide basis. Under the "old" Targeted Job Tax Credit (TJTC) program, employers who hired young people, ages sixteen to nineteen, who were participating in qualified cooperative education programs, were eligible for tax credits on the wages paid to those young people. The credit limit was 50 percent of the first year's wages and 25 percent of the second year's wages up to $6,000 per employee. This meant the maximum allowable credit was $3,000 per employee the first year and $1,500 per employee the second year. The credit reduced any taxes owed after all normal deductions were taken.

Under the old TJTC program, there was no family income eligibility requirement for young people in qualified cooperative programs. Under revisions adopted in 1981, only young people from families that meet the criteria of disadvantaged are eligible.

At the present time, there are no firm data to indicate that the old TJTC increased the number of young people in cooperative programs. The largest single group of the seven groups eligible during the 1980 fiscal year, however, was that of the one hundred seventy-nine thousand young people in cooperative programs.* They represented 30 percent of all reported cooperative enrollments for the 1979-80 school year (National Center for Education Statistics 1982). How many of them were in new cooperative jobs stimulated by TJTC is unknown, but a study done for internal use in the Employment and Training Administration (1980) of the U.S.

---

*Parsons 1982: U.S. Employment Service, personal communication.

Department of Labor indicates that there was little impact during the 1979-80 school year. Informal reports from cooperative education coordinators, on the other hand, suggest that the tax credits did induce new employers to offer cooperative jobs.* Better data are needed to determine whether these credits expanded the number of cooperative placements or merely rewarded employers who had cooperated prior to the credits.

Schools as Brokers/Clearinghouses

Another possible method for increasing employer involvement is for schools to act as contracting agents. Instead of conducting the training courses themself, schools would identify appropriate employers and would pay them to provide training. If there were sufficient interest by employers, this could be a flexible and efficient method uniquely suited to the interests of individual students. There would be no need to have a minimum number of students to justify offering a program. Training contracts could be arranged on an individual basis. Provisions could be included in the contract to ensure that the student acquires competence in general skills, not just firm-specific training.

This approach assumes a willingness on the part of employers to take young people with no job specific skills and do all the training necessary to bring them at least to job-entry readiness. The survey of the National Association of Manufacturers (Nunez and Russell 1981) indicates that relatively few manufacturers (15 percent) endorse this approach. Most employers want student-trainees to be at least minimally productive. In many occupational areas this requires some pre-employment training, which most employers seem to see as the responsibility of the schools. No national data exist on the extent of school contracting, but informal impressions suggest that it is rarely used.

---

*Gene Bottoms 1981: American Vocational Association, personal communication.

POLICY IMPLICAITONS

In line with the National Center's assigned function to provide information to assist national planning and policy development, this section assumes that some federal initiatives will continue in vocational education. If the proposed new federalism turns all education programs back to the states, the following analysis may be moot at the federal level but have some relevance to states that wish to increase private sector involvement in their vocational programs. The three methods discussed earlier for increasing involvement--community councils, financial incentives, and schools as brokers/clearinghouses--are discussed here in terms of options that could be pursued to encourage them at the national level.

Community Councils

The three types of councils discussed earlier are based on different premises. The community councils advocated by the National Association for Industry-Education Cooperation and the National Institute for Work and Learning assume that increased communication and interaction among the various organizations in a community will cause them to work together more cooperatively toward common goals. Presumably one of these goals would be increased employer involvement in skill training. The Private Industry Councils (PIC) approach is also designed to encourage cooperative efforts, but this approach places the final decision-making authority with the business/industry majority that is specified for the council.

The current federal legislation governing vocational education (P.L. 94-482) mandates national, state, and local advisory councils. The legislation lists the characteristics required of members of the national and state councils and specifies that local councils "shall be composed of members of the general public, especially of representatives of business, industry, and labor" [Section 105 (g) (1)].

The present legislation thus endorses local involvement but stops short of assigning any specific responsibilities or authority at the local level. If it is judged desirable to increase community (particularly employer) participation in local vocational programs, some possible changes that could be made in the legislation are presented. A brief listing of the potential advantages and disadvantages follows each possible change.

OPTION 1: Assign specific functions to community councils, such as participation in planning, review of local plans, and evaluation of programs.

Advantages	Disadvantages
Assigned functions would provide a clear understanding of the kinds of functions a community council is expected to perform. This would result in increased consistency across the nation in the performance of these councils. Given specific functions to perform, the involvement of council members is likely to increase.	Assigned functions at the national level may stifle local initiative to respond to local conditions. Local councils may not have the technical skills to carry out their assigned functions. Without resources of their own, councils that lack such skills would have to rely heavily upon the local educational agencies, and real community input would not be achieved. If the councils had approval authority for plans, an appeals process would be needed to arbitrate disagreements between the councils and the local educational agencies.

OPTION 2: Allocate funds directly to community councils to be used where the councils judge the need and potential impact to be greatest.

Advantages	Disadvantages
Control over funds would allow community councils to address the needs that they consider highest in priority. It would further allow them to influence services and programs in a direct manner. Control over funds would ensure high levels of involvement among the groups represented on the council. The council would have to assume accountability for the use of the funds.	Allocating funds to community councils quickly becomes very expensive. There are approximately fifty-six hundred second-secondary schools that offer instruction in five or more program areas, and approximately eleven hundred postsecondary institutions (Woodruff 1978). Assuming that each geographic area with a postsecondary institution also has a secondary school, and that several areas have more than one secondary school, the total number of separate local councils would probably be approximately twenty-five hundred to three thousand. If fifty thousand dollars were to be directed to each of twenty-five hundred councils, the total would be $125 million, or 19 percent of

total federal vocational education expenditures during the 1980 fiscal year.

It would be necessary to establish a financial control system to ensure that funds would be used properly and to control abuses. The control system, itself, could become costly.

OPTION 3: Establish a national institute or center to provide leadership, technical assistance, and information dissemination to state and local agencies and private groups that wish to increase private sector involvement in the preparation of young people for work.

Advantages

Such an institute or center would provide a national endorsement of the importance of increased community involvement. It could become a visible and accessible resource. It could develop projects and investigate issues of importance to many community councils that would require resources beyond those available at the local level.

Disadvantages

Such an institute or center may have little impact at the local level. Since local needs are so diverse, the information a national organization could provide might be too general to be useful at the local level. On the other hand, if its services were useful and became well known, it could be overwhelmed with requests for services and be unable to respond adequately.

Financial Incentives

Historically, federal vocational education legislation has provided support for institutions to improve the capacity of public education to prepare people for work. The present legislation is based on the assumption that these institutions can identify skill needs of the labor force and recruit students into programs designed to meet the identified needs. New financial incentive programs, such as vouchers and tax credits, are directed toward individuals and are based on the assumption that individuals and employers, acting in their own self-interest, will select and provide training programs more efficiently than public institutions can.

If Congress decided to pursue the voucher approach, it could redirect vocational legislation from an institutional to an individual basis.

OPTION 4: Require that all or a specified proportion of vocational education funding be directed to individuals, for the purchase of preparation for employment requiring less than a baccalaureate degree.

Advantages	Disadvantages
Vouchers would increase the choices open to students. Different training institutions would have to compete for students, and this should increase their efficiency and effectiveness.	Federal funds could pay for the training of only a small proportion of all vocational students. If the vouchers were targeted to the most needy, they could have a stigmatizing effect. Secondary students may not be mature enough to make wise choices among trainers. To avoid exploitation by unethical practitioners, a costly certification process would be needed.

Changes in the tax code are not within the purview of vocational education legislation. The inclusion of cooperative education under the Targeted Jobs Tax Credit (TJTC) program shows that tax legislation can be written to influence vocational education. Since the TJTC already exists for cooperative programs, there is no need to pose a new option. The limitations in eligibility enacted in 1981 reflect a congressional judgment that the tax credit should be focused on young people from disadvantaged families. Convincing evidence would be needed to persuade Congress that wider eligibility would motivate more employers to participate. The evidence that is available, limited as it is, does not suggest that the original ("old") TJTC, without its restriction to training for the disadvantaged, had a strong motivating effect on employers.

Schools as Brokers/Clearinghouses

The present vocational education legislation in Sections 121 and 122 endorses and provides considerable flexibility for the use of federal funds in work-study and cooperative education programs. There is little in the present law--with the possible exception of the prohibition on commingling of federal with state

and local funds*--that would prevent schools from assuming more active broker/clearinghouse roles.

Contracting with private employers to provide training is not mentioned specifically in the current legislation. Paragraph c under Section 122, Cooperative Vocational Education Programs, allows "for reimbursement of added costs to employers for on-the-job training of students." This paragraph appears to authorize contracting arrangements, if schools would choose to use them.

The support that these Sections provide obviously has not been enough to encourage an expansion of such programs. The number of vocational students in cooperative programs remained relatively constant throughout the 1970s, even though the total number of vocational students was increasing (U.S. Office of Education, undated). Barton (1981) suggests that "the burden of proof should now shift to showing why a particular occupational area should not be approached on a cooperative basis, before federal money is spent on teaching occupational skills" (p. 27). If Congress wishes to encourage more cooperative placement, it can take the following approaches.

OPTION 5: Specify that a certain percentage of the grant given to each state be spent on cooperative vocational education programs.

Advantages	Disadvantages
Directing federal funds to cooperative programs emphasizes their importance and ensures that the funds will be used in accordance with congressional intention.	Designating percentages of funds for particular purposes (set-asides) is used extensively in the existing legislation. The practice limits state and local flexibility, and there are questions as to whether targeting funds achieves results beyond minimum compliance. Funds were specifically allocated to cooperative programs under the Vocational Education Amendments of 1968 (P.L. 90-576, Section 172), but did not significantly increase the number of students in such programs.
States and localities would work aggressively to develop cooperative agreements to qualify for the designated funds.	

*Program administrators claim that it is virtually impossible to avoid commingling at the local level (Ruff 1980).

OPTION 6: Require that all programs receiving federal funds deliver half or more of the total training in cooperative placements, or justify why this is not possible.

Advantages	Disadvantages
This requirement would ensure that more training was conducted in cooperative settings. It would set cooperative training as a high national priority.	Certification of the required amount of cooperative training would be burdensome. The justification process for programs or localities where cooperative programs were not possible would add to the bureaucratic burden. This degree of federal prescription for conducting programs would be likely to encounter considerable resistance at the state and local levels.

A disadvantage of both Options 5 and 6 is that the burden for encouraging employers to participate in cooperative programs remains with school officials. There is little in these options to encourage increased responsibility among employers for the preparation of the future work force.

Some Final Thoughts

Current conditions in the labor force certainly are not propitious for the advocacy of increased cooperative education. As this is written in June 1982, the unemployment rate for the total labor force is almost 10 percent. Policymakers will be examining very carefully any proposals that could lead to the displacement of adult workers by student-trainees. Employers, regardless of their desire to assume a more active role in training young people, must consider the impact on their permanent work force if they enter into cooperative agreements. Policy, however, is a plan to achieve some future goal or condition, and there are many observers (e.g., Taggart 1981) who believe the major employment problem during the later 1980s will be a shortage of workers.

Of the various options presented in this paper, the community council approach comes closest to addressing the need to increase a sense of responsibility or "ownership" on the part of employers in the preparation of young people for employment. Our free enterprise society, which encourages occupational and geographic mobility in response to the changing needs of the labor market, provides little financial incentive for employers to provide training beyond that needed for their own foreseeable production needs. Institutional arrangements are needed that will

involve employers in the total process of planning, implementing, and evaluating training programs for long-term as well as short-term needs.

The various community councils described above are probably the closest current approximation to such arrangements. What evidence is available, however, suggests these councils have not progressed to true collaborative activities. Further encouragement and study of such councils are needed to determine if it is possible to have joint public-private decision making that protects the interests of individuals as well as the interests of the organizations that will eventually employ them.

REFERENCES

Barton, Paul E. Vocations and Education Policy: A Federal Perspective. Washington, DC: National Institute for Work and Learning, 1981.

Carnegie Council on Policy Studies in Higher Education. Giving Youth a Better Chance: Options for Education, Work, and Service. San Francisco: Jossey-Bass, 1979.

Clark, Donald M. "A Post-Industrial Perspective on Improving Joint Efforts between Education and the Employment Community." In Job Training for Youth, edited by Robert E. Taylor, Howard Rosen, and Frank C. Pratzner. Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1982.

Elsman, Max, and the National Institute for Work and Learning. Industry-Education-Labor Collaboration. An Action Guide for Collaborative Councils. Washington, DC: U.S. Government Printing Office, 1981.

Employment and Training Administration, Office of Program Evaluation, Division of Staff Evaluation. The Use of TJTC in Cooperative Education: Report of an OPER Staff Survey. Washington, DC: U.S. Department of Labor, 1980.

Lewin-Epstein, Noah. Youth Employment during High School. An Analysis of High School and Beyond: A National Longitudinal Study for the 1980s. Washington, DC: National Center for Education Statistics, 1981.

Lewis, Morgan V., and Russell, Jill. Trends, Events, and Issues Likely to Influence Vocational Education in the 1980s. Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1980.

McKinney, Floyd; Franchak, Stephen; Halasz, Ida; Morrison, Irene; and Fornash, Patricia. Factors Relating to the Job Placement of Former Postsecondary Vocational-Technical Education Students. Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1982.

National Association for Industry-Education Cooperation. Industry-Education Councils: A Handbook. Buffalo, NY: National Association for Industry-Education Cooperation, undated.

National Center for Education Statistics. Preliminary Tables from the Vocational Education Data System for School Year 1979-80. Washington, DC: National Center for Education Statistics, 1982.

National Commission on the Reform of Secondary Education. The Reform of Secondary Education: A Report to the Public and the Profession. New York: McGraw-Hill, 1973.

National Commission on Youth. The Transition of Youth to Adulthood: A Bridge Too Long. Boulder, CO: Westview Press, 1980.

National Panel on High School and Adolescent Education. The Education of Adolescents. The Final Report and Recommendations of the National Panel on High Schools and Adolescent Education. Washington, DC: U.S. Government Printing Office, 1976.

Nunez, Ann, and Russell, Jill. Manufacturers' Views of Vocational Education. Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1981.

Panel on Youth of the President's Science Advisory Committee. Youth: Transition to Adulthood. Washington, DC: U.S. Government Printing Office, 1973.

Prager, Audrey; Goldberg, Judith; Cohen, Marcia; and Finn, Peter. Education and Work Councils: Progress and Problems. Cambridge, MA: Abt Associates, 1980.

Ruff, Richard D. A Study of State Level Administration of Vocational Education. Columbus, OH: National Center for Research in Vocational Education, The Ohio State University, 1980.

Seessel, Thomas V. Making the Connections: Private Industry Councils, A New Direction for CETA. Philadelphia, PA: The Corporation for Public/Private Ventures, 1980.

Taggart, Robert. A Fisherman's Guide: An Assessment of Training and Remediation Strategies. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1981.

U.S. Bureau of the Census. Reference Manual on Population and Housing Statistics from the Census Bureau. Washington, DC: U.S. Bureau of the Census, 1978.

U.S. Department of Labor, Employment and Training Administration. Fact Sheet: Income Tax Credits for Hiring Hard-to-Employ Workers. Washington, DC: U.S. Department of Labor, 1981.

U.S. Department of Labor, Employment and Traning Administration. Fact Sheet: Private Sector Initiative Program. Washington, DC: U.S. Department of Labor, 1980.

U.S. Office of Education. Status of Vocational Education in 1978. Washington, DC: U.S. Office of Education, undated.

Wirtz, Willard, and the National Manpower Institute. The Boundless Resource: A Prospectus for an Education-Work Policy. Washington, DC: New Republic Book Company, 1975.

Woodruff, Alan, and others. National Study of Vocational Education Systems and Facilities, Volume I: Technical Report. Silver Springs, MD: Institutional Development Associates, Inc. Rockville, MD: Westat Research Inc., 1978.

APPENDIX

Reports of National Councils and Panels Relevant to Increased Community Involvement in Cooperative Vocational Education

Title:	Youth: Transition to Adulthood
Date/Publisher:	1973, U.S. Government Printing Office
Author:	Panel on Youth of the President's Science Advisory Committee, James S. Coleman, Chairperson
Sponsor:	Office of Science and Technology, Executive Office of the President
Groups Represented:	A local superintendent of schools, Office of Science and Technology, university affiliated scholars
Recommendations Regarding Vocational Education:	Recommendations are made for eight approaches that would increase the opportunities for young people to have a wider variety of experiences and assume more responsibility for their activities. The recommended experiences would be primarily in work or public service settings and would increase the contact young people have with people of different ages. The recommendations assume that such experiences are valuable and can be had at little or no cost to academic achievement because of the "slack, redundancy, or diminishing returns in current schooling, which would allow these additional experiences to be substituted for some schooling without loss" (p. 174). The report recommends research to test the validity of these assumptions. No specific recommendations are made regarding vocational education. The three most directly related are: (No. 2) increased movement between school and work; (No. 3) changes in work organizations to incorporate youth; and (No. 5) vouchers for youth to be used to purchase additional education or skill training.

Title:	The Reform of Secondary Education: A Report to the Public and the Profession
Date/Publisher:	1973, McGraw-Hill
Author:	The National Commission on the Reform of Secondary Education, B. Frank Brown, Chairperson
Sponsor:	Charles F. Kettering Foundation
Groups Represented:	Formal. American Association of School Administrators, National School Boards Association, Chief State School Officers Association, National Association of Secondary School Principals, National Congress of Parents and Teachers, National Catholic Education Association, the North Central Association of Colleges and Secondary Schools. Informal. State legislature, teachers, teacher training institutions, volunteer and tutorial programs, career education, higher education, high school student bodies, private sector.
Recommendations Regarding Vocational Education:	8. Expanding career opportunities. Secondary schools must realign their curricula to provide students with a range of experiences and activities broad enough to permit them to take full advantage of career opportunities in their communities. To meet this objective, basic components of the school program will have to be offered in the late afternoon or in the evening for some students (p. 49). 9. Career education. Career education advisory councils, including representatives of labor, business, community, students, and former students, should be established to assist in planning and implementing career education programs in comprehensive high schools. Career awareness programs should be initiated as an integral part of the curriculum to assure an appreciation of the dignity of work. Opportunity for exploration in a variety of career clusters should be available to students in grades 8 through 10.

In grades 11 and 12, students should have opportunities to acquire hard skills in a career area of their choice. This training should involve experience in the world outside school and should equip the students with job-entry skills (pp. 49-50).

10. Job placement. Suitable job placement must be an integral part of the career education program for students planning to enter the labor force upon leaving school. Secondary schools should establish an employment office staffed by career counselors and clerical assistants. The office should work in close cooperation with the state employment services. Agencies certifying counselors for secondary schools should require such counselors to show experience in job placement as a condition for granting initial certification.

Title:	The Boundless Resource: A Prospectus for an Education-Work Policy
Date/Publisher:	1975, New Republic Book Company
Author:	Willard Wirtz and the National Manpower Institute
Sponsor:	National Manpower Institute, with funding mainly from the Rockefeller Brothers Fund and The Carnegie Corporation of New York; also Harvard University and corporate sponsors, particularly General Telephone and Electronic Corporation
Groups Represented:	Private corporations, higher education, private foundations, research organizations, public schools, labor unions, National Manpower Institute, National Academy of Sciences
Recommendations Regarding Vocational Education:	Eleven shorter-term "proposals" and four longer-term "propositions" are advanced to bring about a closer relationship between education and work. The proposals are rather specific and include the establishment of community councils, improvement in the amount and quality of career information and guidance that students receive, provision for work and service experience in the community, examination of laws and practices that constrain movement between education and work, and the development of national and state policies to integrate education and work. The propositions are broader and are designed to expand the concept of education-work policy and the decision-making processes that influence such policy. No recommendations specific to vocational education are presented.

Title: The Education of Adolescents. The Final Report and Recommendations of the National Panel on High Schools and Adolescent Education

Date/Publisher: 1976, U.S. Government Printing Office [HEW Publication No. (OE) 76-0004]

Author: National Panel on High School and Adolescent Education, John Henry Martin, Chairperson and Director

Sponsor: Office of Education, U.S. Department of Health, Education, and Welfare.

Groups Represented: Higher education, high school students, public education, private foundations, government liaisons.

Recommendations Regarding Vocational Education: This report contains two sets of recommendations. The first general set is presented in chapter 2. The second set is specific to the preparation of youth for work and is presented in chapter 10.

From Chapter 2

2. That education programs be inaugurated for the joint participation of adolescents and other interested and qualified adults in the community --pedagogical programs which may be designated Participatory Education (learning by doing what is socially useful, personally satisfying, and health-supporting for the individual and the community).

[As part of this general recommendation,] the Panel recommends the creation of a community career education center. This agency would be the vehicle for new forms of vocational education, such as reducing emphasis upon job training in the high school and increasing work experience, on-the-job training, job finding resources, and career information activities, all located and carried on in the community. Given the startlingly poor results found by cost-benefit studies of conventional vocational education programs, state subsidies for

in-school shop classes be made transferable at local option to various on-the-job training, job placement, and job subsidy programs (pp. 10-11).

From Chapter 10

7. The Panel is convinced that, with a few notable exceptions, the vocational shop courses in both comprehensive high schools and vocational education schools fail in their stated objectives (p. 116).

8. The Panel strongly endorses work-study and cooperative education programs for adolescents and calls for their expansion (p. 117).

11. The secondary school should reassess its role in the preparation of youth for work to determine where and how it can contribute most effectively (p. 119).

12. The Panel recommends that each vocational training program in a high school or community college be operated under and with an advisory board of business, industry and union representatives, as well as teachers and students (p. 120).

Title:	Giving Youth a Better Chance: Options for Education, Work, and Service
Date/Publisher:	1979, Jossey-Bass Publisher
Author:	Carnegie Council on Policy Studies in Higher Education, Clark Kerr, Chairperson
Sponsor:	Author
Groups Represented:	Higher education, including a community college; private councils and foundations; the College Entrance Examination Board.
Recommendations Regarding Vocational Education:	The report contains two separately numbered sets of recommendations. One set is in section 1, titled "Summary of Concerns and Recommendations," and is presented under the heading "Priority Recommendations." The second set is presented in sections 2 through 18, in the context of the topics these sections address. The recommendations directly relating to vocational education from each set are presented separately below.

Set 1 - Section 1, Priority Recommendations

4. Stop the tracking of students; all programs should be individualized programs (p. 24).

5. Put applied skill training in private shops (with the exception of clerical skills and home economics), when not moved to the postsecondary level. The basic vocational (and academic) skills for the high school to concentrate on are the skills of literacy and numeracy, and good work habits (p. 24).

7. Create job preparation and placement centers in the high schools that will follow students for their first two years after graduation or other termination (p. 24).

11. Concentrate most applied skill training at the postsecondary level and particularly in the community colleges (in four-year comprehensive colleges where a community college is not in the locality) (p.24).

12. Create programs in community colleges (and selected comprehensive colleges) where young people can be prepared for jobs and placed in jobs on a part-time basis while attending college (p. 25).

Set 2 - Sections 2 through 18

9. The federal Vocational Education Act should be renamed the Occupational Skills and Work-Study Act, and its provisions should be merged with those for the work-study program that we have recommended.

The legislation should be amended to provide approximately $300 million of existing federal vocational education funds for 75 percent matching grants to the states to stimulate the development of programs that move skill training out of the high school classroom and into the workplace or community college (p. 151).

10. The U.S. Department of Labor and the U.S. Department of Health, Education, and Welfare should cooperate in developing policies for encouraging coordination of manpower [sic] and education programs for youth at the state and local level and in seeking removal of legislative and administrative obstacles, such as differing eligibility conditions, to such coordinations (pp. 151-152).

20. Community colleges should (1) cooperate with CETA and school authorities in the development of training and work-experience programs, (2) experiment with admitting students at age 16 and with the development of middle colleges, (3) provide opportunities for high school students to participate in their occupational programs, and (4) develop more opportunities for cooperative education and apprenticeships for both secondary and postsecondary students.

Comprehensive colleges should assume these responsibilities in communities that lack a community college (p. 187).

30. Federal government programs for training and employment of youth should place strong emphasis on efforts to involve private employers in work-education councils and through provision

of training subsidies, but wage subsidies should be limited to modest experimental programs (p. 234).

31. Federal and state programs to increase the number of apprenticeable occupations, to include more women and minorities in apprenticeship programs, to develop apprenticeship programs in the civil and military services, to seek the cooperation of community colleges in apprenticeship training, and to open up apprenticeship opportunities for secondary school students should continue (pp. 241 - 242).

33. CETA prime sponsors, schools, and community colleges should cooperate in making certain that opportunities for occupational orientation programs are available for both in-school and out-of-school youth (p. 243).

Title:	The Transition of Youth to Adulthood: A Bridge Too Long
Date/Publisher:	1980, Westview Press
Author:	National Commission on Youth, B. Frank Brown, Director
Sponsor:	Charles F. Kettering Foundation
Groups Represented:	Private industry, private institutes and foundations, higher education, public education, labor unions, U.S. Congress.
Recommendations Regarding Vocational Education:	25. Vocational education in a community-based environment. Vocational education should be shifted from the high school into the community, where it more properly belongs. The concept of performance contracting should be revised to monitor the learning of apprentice and vocational skills that are taught by community-based institutions (pp. 6 and 181).